

## ABSTRACT OF THE DISCLOSURE

Herein disclosed is a multiple-output bit stream separating apparatus for inputting an original MPEG-2 bit stream to separate into a plurality of transcoded MPEG-2 bit streams and a plurality of differential bit streams, and a multiple-output bit stream merging apparatus for inputting the transcoded MPEG-2 bit stream and the differential bit streams to reconstruct the original MPEG-2 bit stream. The bit rate of the transcoded MPEG-2 bit stream and the differential bit streams thus multiple times separated are much lower than that of the original MPEG-2 bit stream. This leads to the fact that the multiple-output bit stream separating apparatus and the multiple-input bit stream merging apparatus can promptly and reliably transmit and receive an original MPEG-2 bit stream having a large bit rate by transmitting and receiving a plurality of transcoded MPEG-2 bit streams and a plurality of differential bit streams in place of the original MPEG-2 bit stream.